GROWTH, DEVELOPMENT AND AGING

VOLUME 56, NUMBER 1 SPRING 1992

TABLE OF CONTENTS

Purposes and Policies of Growth, Development & Aging 1
DAVID E. HARRISON

Ontogenic Body Form Changes in Three Ecological Morphotypes of Anuran Tadpoles 3
RICHARD E. STRAUSS and RONALD ALTIG

Survival and Reproduction in *Peromyscus leucopus* in the Laboratory: Viable Model for Aging Studies 17
JOANNA BURGER and MICHAEL GOCHFELD

Heritability of Growth Curve Parameters and Heritability of Final Size: A Simulation Study 23
SABINE G. GEBHARDT-HENRICH

Morphometric Studies in Inbred and Hybrid House Mice. VIII. Effects of Litter Size on Brain Size and Body Size. 35
LARRY LEAMY

Age and Sex-Independent Comparisons of Morphological Measurements 45
C. M. FRAMPTON and G. NUGENT

Growth Allometry of Organs, Muscles and Bones in Mice from Lines Divergently Selected on the Basis of Plasma Insulin0like Growth Factor I 53
R.A. SIDDIQUI, S.M. McCUTCHEON, H.T. BLAIR, D.D.S. MACKENZIE, P.C.H. MOREL, B.H. BREIER and P.D. GLUCKMAN

GROWTH, DEVELOPMENT AND AGING

VOLUME 56, NUMBER 2 SUMMER 1992

TABLE OF CONTENTS

Difficulties with Studying Accelerated Aging 67
DAVID E. HARRISON

A Four-Parameter Generalization of the Gompertz Curve Suitable for Somatic Growth 69
PIERRE JOLICOEUR, THÉRÈSE CABANA and GILLES DUCHARME

Growth and Utilization of Nutrients in Newly-Hatched Chick with or without Removal of Residual Yolk 75
HITOSHI MURAKAMI, YUKIO AKIBA and MASAAKI HORIGUCHI

Morphometrical Analysis of the Short-Term Effects of Hypophysectomy and Food Restriction on Skeletal Muscle Fibers in Relation to Growth and Aging Changes in the Rat 85
C.D. SHOREY, L.A. MANNING, A.L. GRANT and A.V. EVERITT

***Bibliography*: Growth and Embryonic Development and Aging** 95
NATIONAL LIBRARY OF MEDICINE

GROWTH, DEVELOPMENT AND AGING

VOLUME 56, NUMBER 3 FALL 1992

TABLE OF CONTENTS

Response of Fetal and Newborn Piglets to Maternal Protein Restriction During Early or Late Pregnancy 115
WILSON G. POND, RALPH R. MAURER, HARRY J. MERSMANN and SANDRA CUMMINS

A Non-Invasive Technique for the Accurate Measurement of Leg Length in Animals 129
MICHAEL HERMANUSSEN, SILKE BUGIEL, STEFAN ARONSON and CHRISTIAN MOELL

The Influence of Oral and Subcutaneous Administration of a Mixed β-adrenergic Agonist on Tissue and Cell Growth 141
ANTONIO S. DEL BARRIO, MANUEL RGUEZ-MARISCAL, J. ALFREDO MARTINEZ and JESUS LARRALDE

Expression of Transforming Growth Factor-β (TGF-β1) and Insulin-Like Growth Factor II (IGF-II) Messenger RNA in the Developing Subcutaneous Tissue (SQ) of the Fetal Pig 149
R.L. RICHARDSON, J.T. WRIGHT, J-W KIM and G.J. HAUSMAN

Relation Between Brain and Body Growth in Allied Rats 159
A.L. TOWE and M.D. MANN

Effects of Surgical Decapitation and Chicken Growth Hormone (cGH) Replacement Therapy on Chick Embryo Growth 167
ROBERT C. THOMMES, JAMES E. WOODS, CARLOS ARAMBURO, FRANCES C. BUONOMO and COLIN G. SCANES

Sexual Cranial Dimorphism in Malnourished Rats Treated with Growth Hormone 179
EVELIA E. OYHENART and HECTOR M. PUCCIARELLI

Letter to the Editor 185
PHIL BLOOM

GROWTH, DEVELOPMENT AND AGING

VOLUME 56, NUMBER 4 WINTER 1992

TABLE OF CONTENTS

Tibia Development in Turkeys and Chickens as Affected by Early-Age Feed Restriction 191
S. HURWITZ, E. LIVNE, I. PLAVNIK, M. PINES and M. SILBERMAN

Embryonic Oxygen Consumption and Organ Growth in the Wedge-tailed Shearwater 205
Q. ZHANG and G. C. WHITTOW

β-Adrenergic Receptors and Salivary Gland Secretion During Aging 215
GOPAL RAJAKUMAR, MARKUS M. KOLLER and PHILIP J. SCARPACE

Expression of Phosphatidylinositol-Dependent Phospholipase C Sensitive Qa-2 Antigen is Increased on Peripheral Blood Lymphocytes of Aging Mice 225
MARCIA J. ARMSTRONG and CAROL M. WARNER

Growth Analysis By the First, Second, and Third Derivatives of the Richards Function 237
SUDHIR R. NATH and FRANK D. MOORE III

A Mathematical Analysis of Human Embryonic and Fetal Growth Data 249
WALTER D. WOSILAIT, RICHARD H. LUECKE and JOHN F. YOUNG

Ontogenetic Allometry of Ossified Fetal Limb Bones 259
M. A. WATKINS and R. Z. GERMAN

A Review of Techniques For Quantifying Sexual Size Dimorphism 269
JEFFREY E. LOVICH and J. WHITFIELD GIBBONS

Book Review - Facial Growth in the Rhesus Monkey 282
EMET D. SCHNEIDERMAN

Meeting Announcement 283

Author Index 286

Subject Index 287